Institutional Controls: Where Are We Going?

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DEFINITION

Institutional Controls (ICs) are written instruments, such as administrative and/or legal controls, that help minimize the potential for human exposure to contamination and protect the integrity of a remedy by limiting land or resource use.

PRIMARY PURPOSES

- 1) Minimize the potential for exposure
- 2) Protect the integrity of the remedy.

ESTABLISHING A DIRECTION: TWO FUNDAMENTAL STEPS

- 1) Assess the current state of institutional control use
- 2) Make required policy modifications, with recognition of the desired role for ICs, to ensure the current and future use of ICs will effectively protect human health in the long-term.

State and EPA Assessment of Current Institutional Control Use

To assess present IC policy, current IC use must be characterized. If a response program has a full understanding of what the future holds when it selects an IC as supplement to a remedy, it should be able to answer some basic policy questions with regard to its institutional control program. A question left unanswered may equate to a gap in the program's IC policy.

- 1. In what instances is the program using institutional controls?
- 2. Why are institutional controls used in these instances?
- 3. What types of institutional controls are used? Are they enforceable by the State and/or another entity?
- 4. What burdens are placed on the program by selecting ICs as a portion of the remedy? What benefits?

State and EPA Assessment of Current Institutional Control Use

- 5. What is achieved by the use of the institutional controls?
- 6. In what manner are the institutional controls implemented? By a responsible party or facility with State oversight? By the State? By another entity (e.g., private)?
- 7. Are the ICs being "backed-up" with other legal mechanisms (e.g., enforceable agreements to ensure compliance)? Why or why not?
- 8. Is the program monitoring the ICs? Why or why not?
- 9. What are the identified drawbacks or problems with using institutional controls? What are the benefits?

State and EPA Assessment of Current Institutional Control Use

- 10. Is the program doing anything to address these drawbacks or problems?
- 11. Does the program have an overall approach or process in place for long-term stewardship? If so, what are its key concepts?
- 12. How (periodic inspections, certifications, etc.) will institutional controls be monitored to ensure they remain in-place, continue to be effective, and remain protective of human health and the environment? By whom?
- 13. Who will enforce the requirements of institutional controls throughout the their lifespan (State government, local government, public, property owners)? What enforcement options are available to ensure dropped controls are re-instated (penalties, forced restoration of control measures, other)?

Key Issues That Must Be Addressed In Any Current Or Future Policy For The Use Of Institutional Controls

A State response program that understands the policy issues elicited by the questions in Section A, i.e., "knows where it is going" it terms of future responsibilities, also should understand whether the direction headed is an appropriate one. The discussion below provides guidance on principles that are important for an effective IC program, and should be included in any institutional control or long-term stewardship policy or strategy.

1) ICs SHOULD NOT BE SUBSTITUTES FOR EFFECTIVE CLEANUPS

Though ICs can be an effective *supplement* to site remediation and corrective action, they are generally not an effective *substitute*.

IC programs should emphasize protection of human health and the environment through actual cleanups, using ICs to strengthen the long-term effectiveness of remedial or corrective actions.

An effective or successful cleanup does not always equate to the complete removal of all contaminants. Remedial and corrective options that are inherently characterized by an institutional or engineered land-use control (e.g., capping) may be just as effective in many circumstances.

Risk at some sites may be sufficiently low to allow for a successful "cleanup" with the use of an IC alone. However, with this reliance on the control, it is imperative to evaluate if the contemplated IC can be implemented rationally, both in the short and long-term.

2) LONG-TERM IC COSTS SHOULD BE UNDERSTOOD BEFORE THEY ARE USED ON A SITE

Given limited budget resources and other pressures on response programs, ICs often appear as enticing alternatives to full-blown remediation or corrective action with their relatively low up-front and short-term costs.

One important aspect of this cost calculation is consideration for future administrative and monitoring costs. If State administrative and monitoring costs are not included in consideration of potential remedies, they should somehow play into the decision-making process.

With knowledge and understanding of the true long-term costs of ICs, the fiscally responsible remedial or corrective option may in fact be cleanup to full use with a reduced reliance on institutional controls.

Consideration of appropriate financial mechanisms should be clearly evaluated.

3) REMEDIATION AND IC COSTS SHOULD BE BALANCED TO ENSURE LONG-TERM EFFECTIVENESS OF CLEANUPS

By truly understanding the full cost of both contaminant removal and ICs, a remedy, control, or combinations thereof can be chosen to secure the most effective and efficient option for protection against public health risk.

4) LONG-TERM RESPONSIBILITIES FOR ICs SHOULD BE UNDERSTOOD AND EFFECTIVELY CARRIED OUT BY THOSE WHO WILL BEAR THE RESPONSIBILITIES.

True regardless of whether this responsibility is held by public or private entities.

Knowledge and understanding of the long-term costs, obligations, and responsibilities become important in future budgeting and planning to ensure oversight, maintenance and enforcement remain in place.

5) LONG-TERM IC COSTS SHOULD BE BORNE BY ENTITIES WITH THE CAPABILITY AND THE INCENTIVE TO KEEP THE ICS IN PLACE.

Institutional controls become ineffective as a supplement to cleanup if they are not sustained and kept in place for the long-term.

These responsibilities should be borne by those with not only the long-term financial capability to continue to maintain, monitor, and enforce, but with the incentive to keep doing so.

6) ICs SHOULD HAVE A FIRM LEGAL BASIS THAT MAKES THEM ENFORCEABLE BY PERSONS RESPONSIBLE FOR AND CAPABLE OF ENFORCEMENT

Supported by legal authority to enforce the limitations or restrictions they impose.

Long-term effectiveness of a control becomes difficult or impossible if the entity responsible for enforcement does not have the means or authorities by which to enforce.

7) ICs SHOULD RUN WITH THE LAND AND BE FREE FROM ARCHAIC COMMON LAW DEFENSES

Current common property law limits long-term effectiveness by attaching ICs to property ownership rather than to the property itself.

Mechanisms should be established which allow ICs to separate from the common law and remain in place regardless of property transfer or attempted rezoning..

8) SYSTEMS SHOULD BE IN PLACE TO ENSURE THAT ICS ARE RECORDED TO RUN WITH THE LAND.

9) THE PURPOSE OF ANY IC SHOULD BE CLEAR AND THE OBLIGATIONS IMPOSED UNAMBIGUOUS.

10) SYSTEMS SHOULD BE IN PLACE THAT PROVIDE FOR THE REGULAR IC MONITORING AND INSPECTION.

11) SYSTEMS SHOULD EXIST TO ALLOW FOR PUBLIC KNOWLEDGE OF IC USE AT A SITE.

12) IMPLEMENTATION OF ICS REPRESENTS THE START OF A LONG-TERM REMEDY, NOT THE CONCLUSION OF THE REMEDIATION PROCESS.

IC implementation at a contaminated site does NOT end the remedial process at that site; instead, it is the beginning of a long-term remedy that must be operated, maintained, monitored, and evaluated for effectiveness for as long as the conditions which predicated the need for the remedy exist.